

## Case Report

# Three cases giant panda attack on human at Beijing Zoo

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Received September 4, 2014; Accepted September 19, 2014; Epub November 15, 2014; Published November 30, 2014

**Abstract:** Panda is regarded as Chinese national treasure. Most people always thought they were cute and just ate bamboo and had never imagined a panda could be vicious. Giant panda attacks on human are rare. There, we present three cases of giant panda attacks on humans at the Panda House at Beijing Zoo from September 2006 to June 2009 to warn people of the giant panda's potentially dangerous behavior.

**Keywords:** Panda, attack, surgery

### Introduction

Giant panda attacks on human are rare, especially by those bred in city zoos. The giant panda is a mammal classified into order Carnivora, suborder Caniformia, family Ursidae, and subfamily Ailuropodinae [1], and lives in the Chinese provinces of Sichuan and Gansu. Considered a Chinese national treasure, the giant panda is regarded as having a gentle temperament and is protected under the First-Grade State Protection Act by the Chinese Government [2]. We present three cases of giant panda attacks on humans at the Panda House at Beijing Zoo from September 2006 to June 2009 to warn people of the giant panda's potentially dangerous behavior. The clinical treatment was conducted according to the World Medical Association (WMA) Declaration of Helsinki-Ethical principles for Medical Research Involving Human Subjects.

### Case report

#### Case 1

On September 19, 2006, a 28-year-old drunken male tourist visiting Beijing City Zoo named Zhang XX was attacked when he jumped into the giant panda enclosure and tried to pet it to show off to his companion. His right calf was

bitten severely by this giant panda and was diagnosed as an open injury with skin defect. The debridement procedure was performed at almost midnight after a tetanus antitoxin was injected. The bite site was quite irregular with many small wounds, which may indicate that the patient struggled with the giant panda after being bitten. A free latissimus dorsi muscle flap and skin graft were performed to cover his skin defect 7 days after the first debridement (**Figure 1**).

#### Case 2

On January 7, 2009, a 32-year-old male tourist visiting Beijing City Zoo named Zhang XX was attacked by a giant panda after accidentally falling into its enclosure. His left calf was bitten severely by the giant panda and was diagnosed as an open composited injury with skin defect (**Figure 2**). After the wound was debrided three times with application of vacuum-sealing drainage (VSD), it became stable and clean. A free latissimus dorsi muscle flap was performed to cover the composited tissue defect 12 days after the first debridement.

#### Case 3

On June 7, 2009, a 39-year-old male tourist visiting Beijing City Zoo named Ma XX was attacked

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**Figure 1.** Surgical treatment for the first case. A: Medial side of small leg. B: Posterior side. C: Medial side after debridement. D: Free latissimus dorsi muscle flap. E: The gross contour after one month.



**Figure 2.** Surgical treatment for the second case. A: The posterior and medial side of small leg. B: After debridement and vacuum sealing drainage (VSD). C: The free latissimus dorsi muscle flap was performed.

by a giant panda after accidentally falling into its enclosure. His left foot and right elbow joint were bitten by the giant panda. The wound was debrided and VSD performed. A free latissimus dorsi muscle flap was performed to cover the right elbow composited tissue defect and a free skin graft was performed to cover the skin defect on his left foot 10 days after the first debridement (**Figure 3**).

### Discussion

The giant panda has been widely regarded as one of the most docile zoo animals. Animal attacks on humans from sharks [3], pigs [4], dogs, wolves [5], bears [6], and monkeys among others were not rare, but a giant panda attack has not been reported previously. The giant panda is cherished as a Chinese national treasure because of the small number living in the wild and its gentle, propitious character [7]. Our first case was a drunken male who had jumped

into the giant panda's enclosure and tried to pet it closely. The giant panda may have become infuriated and frightened and bit our case severely. During the struggle after the giant panda had bitten our case, the giant panda did not let go of the case's leg even though the victim tried several methods to get the giant panda to release his leg. Only with the help of a zookeeper could the victim escape from the giant panda's bite. The giant panda has an interesting bamboo diet unlike the other species in the Carnivora order [8]. Research has shown an interesting dopamine metabolic involvement in the giant panda's changes in food choices during its evolutionary process [9]. From these three cases, we can see why the giant panda was classified into the family Ursidae and it may attack humans when infuriated or frightened, even though it is usually very gentle. Giant panda attacks are rare in clinical work, and clinical treatment was almost the same as for other animal attacks.

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**Figure 3.** Surgical treatment for the third case. A: The injured left foot. B: The open wound on right elbow joint. C: The wound after debridement and VSD application. D: The free latissimus dorsi muscle flap was performed to cover the right elbow composited tissue defect (D1) and the free skin graft was performed to cover the skin defect on left foot (D2) 10 days later after the first debridement.

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## Acknowledgements

The Chinese National Natural Science Fund (31171150, 31271284, 30801169, 811711-46, 6), Beijing City Science & Technology New Star ClassificationA-2008-10, and the Chinese Educational Ministry New Century Excellent Talents Support Project (BMU20110270).

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